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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,307	07/29/2003	Jobst La Dous	100341.52572US	4469

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WASHINGTON, DC 20044-4300

EXAMINER
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ROBERTSON, JEFFREY

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/628,307

Applicant(s)

DOUS, JOBST LA

Examiner

Jeffrey B. Robertson

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1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 8-10 is/are rejected.
- 7) ☒ Claim(s) 7 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

1. The previously indicated allowable subject matter of claims 4-7 has been withdrawn based on the new rejection set forth below.

#### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

4. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sommerfeld et al. (U.S. Patent No. 5,886,101) in view of applicant's admitted prior art in paragraph [0025] of the specification. See MPEP §2129 [R-2].

Sommerfeld teaches articles that are formed from two polymer networks of different polymer materials. See col. 2, line 60 through col. 3, line 10 and col. 13, lines 45-47. For claims 1-3 and 10, in col. 12, line 3, Sommerfeld teaches preferred interpenetrating networks that include polyurethane/acrylic networks. Sommerfeld does

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not expressly teach that the articles are transparent. However, since the network taught by Sommerfeld contains the same polymers set forth by applicant in claims 2 and 3, the examiner's position is that articles produced from this network would inherently be transparent. Sommerfeld teaches that photochromic systems are employed and that dyes are added to the interpenetrating networks. Col. 15, lines 23-14 and col. 19, line 63.

For claims 4-6, Sommerfeld teaches the sequential formation of the interpenetrating polyurethane/acrylic network, where the first polyurethane network is formed without an initiator and where the second acrylic network is formed in the presence of heat. See Example 7, columns 32-33.

For claim 8, Sommerfeld teaches that inorganic filler can be added. Col. 22, lines 49-52.

For claim 9, Sommerfeld teaches that the plastic materials produced may be used in automobile production, which would include window glazings. See col. 13, lines 36-47.

Although Sommerfeld teaches that photochromic dyes are added, Sommerfeld fails to teach that the dyeing process is accomplished through a mass dyeing process where the dye is added prior or during the polymerization reaction.

On page 7, in paragraph [0025] of the specification, applicant states that the economical and technical advantages of mass dyeing as compared to subsequent surface dyeing by diffusion are well known to a person skilled in the art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to

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employ a mass dyeing technique to the compositions of Sommerfeld when a photochromic dye is desired. The motivation would have been that as stated by applicant, there are economical and technical advantages of this process that one of ordinary skill in the art would have wanted to obtain in utilizing the compositions of Sommerfeld. As a result of this process, the photochromic dye would be homogenously distributed in the interpenetrating polymer network.

***Allowable Subject Matter***

5. Claim 7 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

6. Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

As a result of the new rejection set forth above, applicant's arguments pertaining to Sommerfeld and whether the dye is homogeneously distributed are considered to be moot.

Applicant additionally argues that the previous Office Action fails to provide equivalency between the polyester urethane and claimed polyurethane. Applicant also argues that acrylics are a general list of compounds and therefore there is no specific teaching of the claimed polyacrylate or polymethacrylate. The examiner disagrees with this argument. Claims 2 and 3 of the instant application both set forth a broad genus of polyurethane and polyacrylate/polymethacrylate. It is the examiner's position that the

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urethanes and acrylates set forth in Sommerfeld fall within this genus. Therefore, no teaching of equivalency is needed. Regarding the acrylates, see Example 7 of Sommerfeld for specific teachings of polyacrylates. In addition, since Sommerfeld teaches that the plastic materials are used in automobile applications, the examiner's position is that this would include window glazings.


### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy P. Gulakowski can be reached on (571) 272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JBR



Jeffrey B. Robertson  
Primary Examiner  
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